UNITED STATES DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE

CONSTRUCTION SPECIFICATION CS-54: "METAL FABRICATION"

54.1 SCOPE

The work shall consist of furnishing, fabricating, and installing metal work including metal parts of composite structures.

54.2 MATERIALS

- a. Unless specified on the drawings, steel shall be carbon steel of a malleable, weldable quality.
- b. Aluminum alloy products shall be Alloy 6061-T6 unless specified on the drawings.
- c. Bolts, nuts, washers, rods, rivets, etc., shall be compatible with the material being fastened.

54.3 PROTECTIVE COATINGS

- a. Metal shall be protected and all damaged coating shall be repaired.
- b. Galvanizing of steel shall be performed by the fabricator using the hot dip process.
- c. All unprotected metal shall be cleaned and painted.

54.4 FASTENERS

Fasteners shall be of the grade, size and at locations shown on the drawings.

Riveting, welding, and or bolt tightening shall not be done until the structure is stiffened and properly aligned.

54.5 <u>FABRICATION</u>

Metal items shall be fabricated to the dimension shown on the drawings. Welded, riveted and bolted joints shall have the strength of the material being secured.

54.5 <u>ERECTION</u>

The metal shall be erected to the lines, grades and dimensions shown on the drawings. Riveting and welding shall not be done until structure is stiffened and properly aligned.